

The Standards

News on the DOE Technical Standards Program



Forum

Volume 8 – Number 2 – September 2000



The Savannah River Site Standards Program Part 2—SRS Engineering Guides

By: James McAndrews, Savannah River Site (SRS)

The June 2000 edition of *The Standards Forum* provided a brief outline of the Engineering Standards program at SRS and a list of site standards used to supplement national codes and standards. The article was titled "The Savannah River Site (SRS) Standards Program, Part 1—SRS Engineering Standards." This article is Part 2 of the two part series and will be focusing on the SRS engineering guides used at SRS.

SRS Engineering Guides

Guidance information and best engineering practices provide a useful perspective for past engineering practices at SRS. These guidelines are based on former site standards that were not incorporated into the new SRS Engineering Standards Manual and include installation information applicable to safety class, safety significant, and nuclear work. The guides are reviewed every three years against the information available in the private sector and are revised or deleted when appropriate.

The following list contains samples of the 58 SRS engineering guides with a description of their purpose and scope. Copies of the guides can be accessed through the SRS site electronic system (Shrine) or by contacting the Westinghouse Savannah River Company (WSRC) Alternate Technical Standards Manager (TSM), Jim McAndrews, 803-952-8099, james.mcandrews@srs.gov.

Guide Number 01061-G, Rev. 1, Noise Exposure

This guide provides guidelines for design of acoustical environments to ensure adequate auditory communications and personnel protection from noise.

Guide Number 01063-G, Rev. 0, Design Criteria for Airborne Radionuclide Effluent Monitoring Systems

This document provides a method to determine the appropriate design criteria for radionuclide airborne effluent monitoring systems in DOE-owned or operated non-reactor nuclear facilities.

Guide Number O1100-G, Rev. 3, Design Criteria for Structures, Systems, and Components

This document describes the method for identifying the design criteria to be used for replacement items, modifications to existing facilities, and new facilities. This document includes an evaluation process to decide whether to use current codes and standards or existing design criteria (code of record) for a structure, system or component (SSC).

Guide Number 01610-G, Rev. 0, Materials – Shelf Life

This engineering guide establishes methods for determining and controlling the shelf life of materials that are subject to aging during storage. This document describes materials subject to shelf life considerations, provides a means for establishing shelf life values, and provides a methodology for evaluating materials that have exceeded their established shelf life.

Guide Number 02701-G, Rev. 0, Drainage Trenches

This document applies to drainage in process areas for the control of fire, where flammable liquids may be carried on the surface of water discharged by fire suppression systems or hose lines.

Guide Number 03010-G, Rev. 0, Coring, Chipping and Drilling in Concrete

This document provides technical data for coring, chipping, and drilling in concrete for any of the permanent plant structures associated with SRS projects. Data is also included to properly document the cutting of any reinforcing steel that becomes a necessary part of the work described herein.

Guide Number 03251-G, Rev. 0, Concrete Anchors

This document provides technical data for the design, selection, and qualification of concrete expansion anchors for SRS. It is applicable to anchor bolts of the type listed in Section 1-5.0 for which documentation regarding type, size and embedment depth of the anchor bolt is available.

(Continued on Page 14) ►►

INSIDE THIS ISSUE

A Note From the Manager	2
New TSMs	2
TSP Spotlight	3

Standards Actions	4
Topical Committees	11
News Briefs	12

Upcoming Meetings	15
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ment several improvements that will enhance access to Technical Standards Program (TSP) services and information. The changes are based on input from our Technical Standards Managers (TSMs), feedback from our Web Site visitors, and lots of callers looking for information.

Look for an Improved TSP Web Site

One of the most helpful changes in process is the redesign of the TSP Web Site. The most common Web Site user activities include finding, reading, and printing DOE Technical Standards. This is followed by finding and using services and information from the TSP Procedures (TSPPs) on developing, coordinating, and maintaining DOE Technical Standards. Finding forms and formats used in the TSP is another high volume effort.

The most commonly used functions, services, and information will be located and emphasized on the first page, along with other familiar functions. More "mouse-over" and "drop-down" readout features will provide information on functions and services for visitors. The links to Directives and voluntary consensus standards sites will be enhanced. We plan to strengthen the reciprocal links between Directives and DOE Technical Stan-

The TSP Commitment: Continuous Improvement

The Technical Standards Program Office (TSPO) is working in conjunction with the Technical Standards Managers' Committee (TSMC) to imple-

ments. In the area of electronic publishing, we plan to publish more documents with "built-in" links to related documents, references, and Directives. Another improvement in the mill is to use a modified Directives System REVCOM comment tracking system for the coordination of DOE Technical Standards. We are also expanding the numbers of DOE Topical Committees and links to topical committee Web Sites with access to their subject matter experts.

The TSPO is continuing, with much-needed help from participants in the TSP, in these and other efforts to keep the tools and content of the TSP technically current and useful. Of course, some of what we hope to do is dependent on shared resources, budgets, and technical personnel. In addition, much of what we can do is dependent on ongoing DOE-level information management efforts such as the DOE Portal.



Rick Serbu
TSP Manager

There are challenges, but we look forward to making your access to technical standards information easier and more functional. Keep checking for improvements and keep the feedback on the TSP coming!

— Rick Serbu

Welcome Aboard !



The Technical Standards Managers (TSMs) are the backbone of the DOE Technical Standards Program! These knowledgeable individuals serve as their organization's standards point of contact and contribute to the coordination of Department-wide TSP activities. A great deal of their work time is spent in assuring that standards activities take place in a manner that will promote safe, economical, and efficient operations locally and across the DOE complex.

With nearly 70 active and mobile people involved in TSM activities, it can be a daunting task just to keep up with the

retirements and reassignments affecting the TSM roster. This "Welcome Aboard" feature is designed to introduce you to the new TSMs and help you keep abreast of the rapidly changing make-up of the Technical Standards Managers' Committee (TSMC).

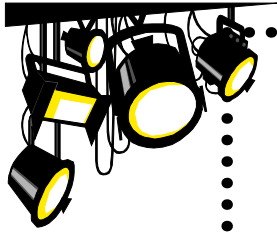
The TSMC welcomes the following recently added members.

Nancy P. Buschman
U. S. Department of Energy
Office of Nuclear Facilities Management
NE-40, E-469/GTN
19901 Germantown Road
Germantown, MD 20874
Phone: 301-903-1923, Fax: 301-903-5005
Nancy.Buschman@hq.doe.gov

John M. Searing
Brookhaven National Laboratory
P.O. Box 5000, Bldg. 197B
29 Cornell Avenue
Upton, New York 11973-5000
Phone: 631-344-3108, Fax: 631-344-8395
searing@bnl.gov



Technical Standards Program Spotlight



Kally Barker

Technical Standards Manager

Idaho National Engineering and
Environmental Laboratory

Idaho Falls, Idaho



Kally Barker is the supervisor of the Source Requirements organization in the Support Services Division for Bechtel BWXT Idaho at the Idaho National Engineering and Environmental Laboratory (INEEL) in Idaho Falls, Idaho. This position includes responsibility for identification and control of requirements to ensure they are documented and that responsibilities for effective implementation are assigned.

Technical Standards—Important Tools for Complex Tasks

Kally has worked in the requirements area for 10 years and was designated the Technical Standards Manager for INEEL in January 1999. "Technical Standards are important tools to help us conduct business in a complex environment. The Technical Standards Program (TSP) has been very successful in coordinating the development of standards that are unique to DOE business," Kally told *The Standards Forum*. She is a regular participant in the monthly Technical Standards Managers' Committee monthly teleconferences. She finds these teleconferences an "especially useful" forum for resolving issues and sharing best practices.

INEEL's Source Requirements Organization— a Key Player in Implementing SBMS at INEEL

"The implementation of DOE's Standards-Based Management System (SBMS) at INEEL will integrate processes and provide employees, at all levels, with documents that are current, accurate, and relevant to the work being performed," Kally said.

INEEL's Source Requirements organization is tasked to provide tools to help track the implementation of requirements throughout the laboratory. A process for ensuring traceability of requirements was developed during implementation of the Integrated Safety Management System (ISMS) at INEEL. The process, known as the Requirements Management Process, was subsequently identified by DOE as a "noteworthy practice" (an exceptional or innovative approach that could be useful for benchmarking by other DOE sites and facilities). "The implementation of SBMS methodology will enhance the processes at INEEL by documenting the traceability of requirements, tech-

"The implementation of the SBMS methodology will enhance the processes at INEEL by documenting the traceability of requirements, technical standards, and management direction into implementing documents."

— Kally Barker

nical standards, and management direction into implementing documents," Kally explained. "An integral part of the process is the production of a Record of Analysis that documents the basis for the selection of each requirement. This information will be available to all employees through a Web-based application, providing a tailored set of requirements and standards that will continue to help employees at all levels perform work safely and efficiently."

Closing Thoughts—on the Future of the TSP

Kally has observed that the DOE Technical Standards Managers program has been very successful in bringing together interested individuals from DOE HQ, Field Offices, and contractors, with a common goal of developing a path forward to implement both mandatory and non-mandatory requirements. "I know that in the future this program will continue to be successful and will provide an avenue to utilize the vast amount of experience around the DOE complex, and I am looking forward to continuing my interaction with this group," she concluded.

Personal Note

Kally manages to keep busy during her "off-hours" as well. She enjoys golfing, camping, skiing, and snowmobiling. She is married and has two wonderful children, Kami (age 19) and John (age 13). She is an Idaho native, but enjoys traveling to other areas of the country—especially the warmer areas.



Standards *Actions*



Technical Standards Program Document Status (2000-08-31)

Activity Summary

In Conversion – 4

In Preparation – 34

Out for Comment – 14

Published this Month – 3

5-year Reviews

In Revision – 3

In Reaffirmation – 1

To be Superseded – 6

Cancellations Pending – 9

Cancellations in Progress – 1

No Current Action – 12

DOE Technical Standards Projects Initiated

If you have any questions or are interested in participating in the development of these standards, please contact the persons listed below. Complete listings of all DOE Technical Standards projects and their status are given in the Technical Standards Program (TSP) Web Site, <http://tis.eh.doe.gov/techstds/>. To access these lists from the home page, click on "DOE Technical Standards," then click on "Projects" in the left-hand frame to show the links to the project lists.

The following DOE Technical Standards projects were recently initiated.

- *Beryllium Lymphocyte Proliferation Testing*, Project Number SDMP-0029, Paul Wambach, EH-6; 301-903-7373, Fax 301-903-5072, Paul.Wambach@eh.doe.gov.
- *Human Factors Handbook — Man/Machine Interface Design Criteria*, Project Number HFAC-0013, Robert M. Waters, EH-52, 301-903-5755, Fax 301-903-7773, Robert.Waters@eh.doe.gov.
- *Human Factors Handbook — Human Error Root Cause Analysis*, Project Number HFAC-0014, Robert M. Waters, EH-52, 301-903-5755, Fax 301-903-7773, Robert.Waters@eh.doe.gov.

DOE Technical Standards Recently Sent for Coordination

The following draft DOE Technical Standards were recently distributed for coordination.

The appropriate Technical Standards Managers (TSMs) will provide selected reviewers with copies for comment. The full text of this document is available on the TSP Web Site at <http://tis.eh.doe.gov/techstds/>. If you wish to comment on this document, please notify your TSM.

- *Technical Program Manager Functional Area Qualification Standard*, Project Number TRNG-0014, M. Norman Schwartz, EH-53, 301-903-2996, Fax: 301-903-6172, Norm.Schwartz@eh.doe.gov. Comments are due October 25, 2000.
- *Chemical Management*, Project Number SAFT-0073, Dr. Bill McArthur, EH-52, 301-903-9674, Fax: 301-903-7773, Bill.Mcarthur@eh.doe.gov. Comments are due October 26, 2000. This document is being re-released for coordination.

DOE Technical Standards Recently Published

The following DOE Technical Standards have recently been published:

- DOE-STD-1137-2000, *Fire Protection Engineering Functional Area Qualification Standard*, July 2000.
- DOE-STD-1138-2000, *Industrial Hygiene Functional Area Qualification Standard*, July 2000.
- DOE-STD-3006-2000, *Planning and Conduct of Operational Readiness Reviews (ORR)*, June 2000. This document updates and supersedes DOE-STD-3006-95.

DOE employees and DOE contractors may obtain copies from the ES&H Technical Information Services, U.S. Department of Energy; 1-800-473-4375, Fax 301-903-9823.

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Standards Actions (Continued from Previous Page)

Subcontractors and the general public may obtain copies from the U.S. Department of Commerce, Technology Administration, National Technical Information Service, Springfield, Virginia 22161; 703-605-6000, 703-605-6900.

Copies of DOE Technical Standards (i.e., DOE Standards, Specifications, Handbooks, and Technical Standards Lists) are also available on the TSP Web Site.

Non-Government Standards**American National Standards Institute**

The American National Standards Institute (ANSI) publishes coordination activities of non-Government standards (NGS) bi-weekly in *ANSI Standards Action*. Recent electronic copies (no hardcopies are produced) are available on the ANSI Web site at http://web.ansi.org/rooms/room_14/. Electronic back copies are available to ANSI members only. For information on site membership, ask your local ANSI contact. For information on individual or group ANSI membership, call Susan Bose at 212-642-4948, e-mail sbose@ansi.org.

Hardcopy versions of published non-Government standards listed in this section may be obtained from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado, 80112, 800-854-7179, Fax 303-397-2740, global@ihs.com, <http://global.ihs.com>. Electronic delivery of selected documents is available through ANSI at <http://webstore.ansi.org>. Copies of the listed draft standards and the procedure for commenting on the same may be obtained by contacting the standards developing organization.

The following listings are extracted from *ANSI Standards Action* and are representative of NGS development activities that may be relevant to DOE operations. Refer to *ANSI Standards Action* for a more extensive listing of changes and new publications, standards developing organizations, and additional information about submitting comments. Additional information on ANSI activities and available non-Government standards can be found on the ANSI Web site, <http://www.ansi.org>, or through the National Standards System Network, <http://www.nssn.org>.

The following American National Standards are currently in coordination (comment due dates follow each entry):

- AIHA Z9.2, *Design and Operation of Local Exhaust Systems, Fundamentals Governing the* [revision of ANSI Z9.2-1979 (R1991)] - October 9, 2000.
- API 621, *Reconditioning of Metallic Gate, Globe, and Check Valves* (new standard) - October 24, 2000.
- API 660, *Shell and Tube Heat Exchangers* (revision of ANSI/API 660-1993) - October 24, 2000.
- API MPMS Chapter 14.3, *Part 2, Chapter 14 Natural Gas Fluids Measurement, Section 3 - Concentric, Square-Edged Orifice Meters, Part 2 - Specification and Installation Requirements* (new standard) - October 24, 2000.

- ASHRAE 62 Addendum o, *Ventilation for Acceptable Indoor Air Quality* (supplement to ANSI/ASHRAE 62-1989) - September 25, 2000.
- ASME A112.14.1, *Backwater Valves* [revision of ANSI/ASME A112.14.1-1975 (R1998)] - October 24, 2000.
- ASME MFC-10M, *Method for Establishing Installation Effects on Flowmeters* (revision of ANSI/ASME MFC-10M-1994) - October 10, 2000.
- ASME PCC-1 2000 Edition, *Guidelines for Pressure Boundary Bolted Flange Joint Assembly* (new standard) - October 24, 2000.
- ASTM A1009, *Specification for Soft Magnetic MnZn Ferrite Core Materials for High Frequency (10KHz to 1MHz) Power Transformer and Filter Inductor Applications* (new standard) - October 24, 2000.
- ASTM C559, *Test Method for Bulk Density by Physical Measurements of Manufactured Carbon and Graphite Articles* (new standard) - October 24, 2000.
- ASTM C625, *Practice for Reporting Irradiation Results on Graphite* (new standard) - October 24, 2000.
- ASTM C651, *Test Method for Flexural Strength of Manufactured Carbon and Graphite Articles Using Four-Point Loading at Room Temperature* (new standard) - October 24, 2000.
- ASTM C695, *Test Method for Compressive Strength of Carbon and Graphite* (new standard) - October 24, 2000.
- ASTM E1645, *Practice for the Preparation of Dried Paint Samples for Subsequent Lead Analysis by Atomic Spectrometry* (revision of ANSI/ASTM E1645-94) - September 25, 2000.
- ASTM E1740, *Test Method for Determining the Heat Release Rate and Other Fire-Test-Response Characteristics of Wallcovering Composites Using a Cone Calorimeter* (new standard) - September 25, 2000.
- ASTM E1745, *Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs* (new standard) - October 24, 2000.
- ASTM E1864, *Practice for Evaluating Quality Systems of Organizations Engaged in Conducting Facility and Hazard Assessments to Determine the Presence and Extent of Lead in Paint, Dust, Airborne Particulate, and Soil in and around Buildings and Related Structures* (new standard) - October 24, 2000.
- ASTM E1895, *Guide for Determining Uses and Limitations of Deterministic Fire Models* (new standard) - October 24, 2000.
- ASTM F1731, *Practice for Body Measurements and Sizing of Fire and Rescue Services Uniforms and Other Thermal Hazard Protective Clothing* (new standard) - October 24, 2000.
- ASTM F1868, *Test Method for Thermal and Evaporative Resistance of Clothing Materials Using a Sweating Hot Plate* (new standard) - October 24, 2000.

(Continued on Next Page) ▶

Standards Actions (Continued from Previous Page)

- ASTM F1939, *Test Method for Radiant Protective Performance of Flame Resistant Clothing Materials* (new standard) - October 24, 2000.
 - ASTM F2018, *Test Method for Time-to-Failure of Plastics Using Plane Strain Tensile Specimens* (new standard) - September 25, 2000.
 - ASTM F2021, *Specification for Design and Installation of Plastic Syphonic Roof Drainage Systems* (new standard) - September 25, 2000.
 - ASTM PS95, *Practice for Quality Systems for Conducting in situ Measurements of Lead Content in Paint or Other Coatings Using Field-Portable X-Ray Fluorescence (XRF) Devices* (new standard) - September 25, 2000.
 - ASTM Z7211Z, *Test Method Determining the Fire-Endurance of Perimeter Fire Barrier Systems Using the Intermediate-Scale, Multi-Story Test Apparatus* (new standard) - September 25, 2000.
 - ASTM Z7467Z, *Terminology Relating to Anchors in Concrete and Masonry* (new standard) - September 25, 2000.
 - ASTM Z8032Z, *Terminology of Sustainability Relative to the Performance of Buildings* (new standard) - September 25, 2000.
 - ASTM Z8033Z, *Practice for Data Collection for Sustainability Assessment of Building Elements* (new standard) - September 25, 2000.
 - ASTM Z8310Z, *Test Method for Thermal Stability of Organic Heat Transfer Fluids* (new standard) - October 24, 2000.
 - AWS G2.1M/G2.1:200X, *Guide for the Joining of Wrought Nickel-Base Alloys* (new standard) - October 24, 2000.
 - EIA 364-30, *Electric Connectors - Capacitance Test Procedure* (new standard) - October 24, 2000.
 - UL 569, *Standard for Safety for Pigtails and Flexible Hose Connectors for LP-Gas* (revision of ANSI/UL 569-1994) - September 25, 2000.
 - EIA 364-33, *Inductance Testing for Electrical Connectors* (new standard) - October 24, 2000.
 - FMRC FM 4880, *Fire Test Standard for Class 1: A) Insulated Wall or Walls and Ceilings or Roofs; B) Plastic Interior Finish Materials; C) Plastic Exterior Building Panels; D) Wall and Wall and Ceiling Coating Systems; E) Interior or Exterior Finish Systems* (new standard) - September 25, 2000.
 - ISO/IEC 10118-1:2000, *Information Technology - Security Techniques - Hash-functions - Part 1: General* (new standard) - September 25, 2000.
 - NISO Z39.85-2000, *The Dublin Core Metadata Element Set* (new standard) - September 25, 2000.
 - SJI JG-1.0, *Specification for Joist Girders* (new standard) - October 24, 2000.
 - SJI K-1.0, *Specification for Open Web Steel Joists, K-Series* (new standard) - October 24, 2000.
 - SJI LH/DLH-1.0, *Specification for Longspan Steel Joists, LH-Series and Deep Longspan Steel Joists, DLH-Series* (new standard) - October 24, 2000.
 - UL 1040, *Standard for Safety for Fire Test for Insulated Wall Construction* (new standard) - September 25, 2000.
 - UL 109, *Standard for Safety for Tube Fittings for Flammable and Combustible Fluids, Refrigeration Service, and Marine Use* (new standard) - September 25, 2000.
 - UL 125, *Standard for Safety for Valves for Anhydrous Ammonia and LP-Gas (Other than Safety Relief)* (new standard) - October 24, 2000.
 - UL 508, *Standard for Safety for Industrial Control Equipment* (revision of ANSI/UL 508-2000) - September 25, 2000.
 - UL 508C-2000, *Standard for Safety for Power Conversion Equipment* (revision of ANSI/UL 508C-2000) - September 11, 2000.
- The following American National Standards have been approved for publication** (Publication is to take place within six months following the date shown. Publication status and ordering information may be obtained from ANSI's Customer Service at 212-642-4900.):
- ANSI S2.1-2000, *ANSI/ISO 2041-1990, Vibration and Shock - Vocabulary* (new standard) - July 28, 2000.
 - ANSI/API RP 555-2000, *Process Analyzers* (new standard) - July 20, 2000.
 - ANSI/ASME A112.1.3-2000, *Air Gap Fittings for Use with Plumbing Fixtures, Appliances and Appurtenances* (new standard) - July 5, 2000.
 - ANSI/ASME B30.19-2000, *Cableways* (revision of ANSI/ASME B30.19-1993) - July 14, 2000.
 - ANSI/ASME B30.22-2000, *Articulating Boom Cranes* (revision of ANSI/ASME B30.22-1993) - July 14, 2000.
 - ANSI/ASME B31.1b-2000, *Power Piping* (supplement to ANSI/ASME B31.1-1998) - June 30, 2000.
 - ANSI/ASTM A1010-00, *Specification for Higher Strength Martensitic Stainless Steel Plate, Sheet, and Strip* (new standard) - May 10, 2000.
 - ANSI/ASTM E2074-00, *Method of Tests for Fire Door Assemblies Under Positive Pressure* (new standard) - April 10, 2000.
 - ANSI/ASTM F2048-00, *Practice for Reporting Slip Resistance Test Results* (new standard) - June 10, 2000.
 - ANSI/AWS B5.5-2000, *Specification for the Qualification of Welding Educators* (new standard) - July 25, 2000.
 - ANSI/EIA 364-108-2000, *Impedance, Reflection Coefficient, Return Loss, and VSWR Test Procedure Measured in the Time and Frequency Domain for Electrical Connectors, Cable Assemblies or Interconnection Systems* (new standard) - July 7, 2000.

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Standards Actions (Continued from Previous Page)

- ANSI/NECA 1-2000, *Practices for Good Workmanship in Electrical Construction* (new standard) - July 25, 2000.
- ANSI/SMACNA 001-2000, *Seismic Restraint Manual: Guidelines for Mechanical Systems* (new standard) - July 31, 2000.

The following international standards are currently in co-ordination (comment due dates follow each entry):

- 1/1829/FDIS, IEC - Part 151: *Electrical and magnetic devices* - July 21, 2000.
- 23A/342/FDIS, Amendment 1 to IEC 61386-1, Ed. 1: *Conduit systems for electrical installations - Part 1: General requirements* - July 21, 2000.
- 45/484/FDIS, IEC 61976: *Nuclear instrumentation - Spectrometry - Test methods for spectrum background in HPGe nuclear spectrometry* - July 28, 2000.
- 45A/400/FDIS, IEC 62118: *Nuclear reactor instrumentation - Pressurized water reactor (PWR) or VVER design - Monitoring adequate cooling within the core during cold shutdown* - June 30, 2000.
- 45A/402/FDIS, IEC 60880-2: *Software for computers important to safety for nuclear power plants - Part 2: Software aspects of defense against common cause failures, use of software tools and of pre-developed software* - July 28, 2000.
- 56/708/FDIS, Draft IEC 60300-3-10, Ed. 1: *Dependability management - Part 3-10: Application guide - Maintainability and maintenance support* - July 21, 2000.
- 65B/415/FDIS, *Mating dimensions between differential pressure (type) measuring instruments and flanged-on shut-off devices up to 413 bar (41,3 MPa)* - July 28, 2000.
- 66/233/FDIS, IEC 61010-1, Ed. 2: *Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements* - July 28, 2000.
- 90/80/FDIS, *Superconductivity - Part 3: Critical current measurement - DC critical current of Ag-sheathed Bi-2212 and Bi-2223 oxide superconductors* - July 21, 2000.
- 95/98/FDIS, IEC 60255-5: *Electrical relays - Part 5: Insulation coordination for measuring relays and protection equipment - Requirements and tests* - August 4, 2000.
- EN 12259-1:1999/prA1, *Fixed firefighting systems - Components for sprinkler and water spray systems - Part 1: Sprinklers* - October 13, 2000.
- EN 12259-3:2000/prA1, *Fixed firefighting systems - Components for sprinkler and water spray systems - Part 3: Dry alarm valve* - October 13, 2000.
- EN 61326, *Electrical equipment for measurement, control and laboratory use - EMC requirements* [IEC 61326:1997/A2:200X - (65A/307/FDIS)] - November 10, 2000.
- ISO/DIS 7675, *Plastics piping systems for soil and waste discharge (low and high temperature) inside buildings - Chlorinated poly(vinyl chloride) (PVC-C)* - November 11, 2000.
- ISO/DIS 8205-1, *Water-cooled secondary connection cables for resistance welding - Part 1: Dimensions and requirements for double-conductor connection cables* - November 4, 2000.
- ISO/DIS 11873, *Hardmetals - Determination of sulfur and carbon contents in cobalt metal powders - Infrared detection method* - October 28, 2000.
- ISO/DIS 13202-2, *Cranes - Test procedures - Part 2: Measurement of linear parameters* - November 18, 2000.
- ISO/DIS 13985, *Liquid hydrogen - Land vehicle fuel tanks* - October 28, 2000.
- ISO/DIS 14592-1, *Water quality - Evaluation of the aerobic bio-degradability of organic compounds at low concentrations -Part 1: Shake-flask batch test with surface water or surface water/sediment suspensions* - October 28, 2000.
- ISO/DIS 15117-1, *Coal flow properties - Part 1: Bin flow* - October 28, 2000.
- ISO/DIS 15384, *Protective clothing for firefighters - Laboratory test methods and performance requirements for wildland firefighting clothing* - November 18, 2000.
- ISO/DIS 16812, *Petroleum and natural gas industries - Shell and tube heat exchangers* - November 7, 2000.
- prEN 13922, *Tanks for transport of liquid dangerous goods with vapour pressure not exceeding 110 kPa at 50°C (including petrol) - Service Equipment - Level detection - Secondary shut off control system* - December 6, 2000.
- prEN 13950, *Gypsum plasterboard thermal, acoustic insulation composite panels - Definitions, requirements and test method* - December 20, 2000.
- prEN 13956, *Flexible sheets for waterproofing - Plastic and rubber sheets for roof waterproofing - Definitions and characteristics* - December 6, 2000.
- prEN 13968, *Geomembranes - Product Specification* - December 27, 2000.
- prEN 13970, *Flexible sheets for waterproofing - Bitumen water vapour control layers - Definitions and characteristics* - December 27, 2000.
- prEN 50354, *Electrical arc test methods for material and garments, for use by workers at risk from exposure to an electrical arc* (for information).
- prEN ISO 8504-1, *Preparation of steel substrates before application of paints and related products - Surface preparation methods - Part 1: General principles* (ISO 8504-1:2000) - November 29, 2000.
- prEN ISO 12569, *Thermal insulation in buildings - Determination of air change in building - Tracer gas dilution method* (ISO/FDIS 12569:2000) (for information).

Standards Actions (Continued from Previous Page)**The following newly published international standards are available:**

- IEC 60050-393-am1-2000, *International Electrotechnical Vocabulary - Chapter 393: Nuclear instrumentation: Physical phenomena and basic concepts.*
- IEC 60204-11-2000, *Safety of machinery - Electrical equipment of machines - Part 11: Requirements for HV equipment for voltages above 1 000 V a.c. or 1 500 V d.c. and not exceeding 36 kV.*
- IEC 60255-22-3-2000, *Electrical relays - Part 22-3: Electrical disturbance tests for measuring relays and protection equipment - Radiated electromagnetic field disturbance tests.*
- IEC 61364 Corr.1-2000, *Nomenclature for hydroelectric powerplant machinery.*
- IEC 61577-1-2000, *Radiation protection instrumentation - Radon and radon decay product measuring instruments - Part 1: General requirements.*
- IEC 61809-2000, *Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed alkaline secondary cells and batteries.*
- IEC 61839-2000, *Nuclear power plants - Design of control rooms - Functional analysis and assignment.*
- IEC/TS 60695-8-2-2000, *Fire hazard testing - Part 8-2: Heat release - Summary and relevance of test methods.*
- ISO 3686-1:2000, *Test conditions for high accuracy turret and single spindle coordinate drilling and boring machines with table of fixed height with vertical spindle - Testing of the accuracy - Part 1: Single column type machines.*
- ISO 7507-5:2000, *Petroleum and liquid petroleum products - Calibration of vertical cylindrical tanks - Part 5: External electro-optical distance-ranging method.*
- ISO 9330-4:2000, *Welded steel tubes for pressure purposes - Technical delivery conditions - Part 4: Submerged arc-welded unalloyed and alloyed steel tubes with specified elevated temperature properties.*
- ISO 9809-2:2000, *Gas cylinders - Refillable seamless steel gas cylinders - Design, construction and testing - Part 2: Quenched and tempered steel cylinders with tensile strength greater than or equal to 1 100 MPa.*
- ISO 10077-1:2000, *Thermal performance of windows, doors and shutters - Calculation of thermal transmittance - Part 1: Simplified method.*
- ISO 10086-1:2000, *Coal - Methods for evaluating flocculants for use in coal preparation - Part 1: Basic parameters.*
- ISO 11602-1:2000, *Fire protection - Portable and wheeled fire extinguishers - Part 1: Selection and installation.*
- ISO 11929-1:2000, *Determination of the detection limit and decision threshold for ionizing radiation measurements - Part 1: Fundamentals and application to counting measurements without the influence of sample treatment.*

- ISO 13680:2000, *Petroleum and natural gas industries - Corrosion-resistant alloy seamless tubes for use as casing, tubing and coupling stock - Technical delivery conditions.*
- ISO 14520-9:2000, *Gaseous fire-extinguishing systems - Physical properties and system design - Part 9: HFC 227ea extinguishant.*
- ISO 14661:2000, *Thermal turbines for industrial applications (steam turbines, gas expansion turbines) - General requirements.*
- ISO 15403:2000, *Natural gas - Designation of the quality of natural gas for use as a compressed fuel for vehicles.*
- ISO 15663-1:2000, *Petroleum and natural gas industries - Life cycle costing - Part 1: Methodology.*
- ISO 16200-2:2000, *Workplace air quality - Sampling and analysis of volatile organic compounds by solvent desorption/gas chromatography - Part 2: Diffusive sampling method.*
- ISO/TR 18529:2000, *Ergonomics - Ergonomics of human-system interaction - Human-centred lifecycle process descriptions.*
- ISO/TS 10811-1:2000, *Mechanical vibration and shock - Vibration and shock in buildings with sensitive equipment - Part 1: Measurement and evaluation.*

American National Standards Projects Initiated

The following is a list of proposed new American National Standards or revisions to existing American National Standards submitted to ANSI by accredited standards developers. DOE employees or contractors interested in participating in these activities should contact the appropriate standards developing organization. DOE-TSL-4 lists the DOE representatives on NGS committees. If no DOE representative is listed, contact the TSPO for information on participating in NGS activities.

International Society for Measurement and Control

Office: 67 Alexander Drive

Research Triangle Park, NC 27709

Fax: 919-549-8288

Contact: Lois M. Ferson, lferson@isa.org

- ISA 75.01.01, *Flow Equations for Sizing Control Valves* (new standard).

National Electrical Contractors Association

Office: 3 Bethesda Metro Center, Suite 1100

Bethesda, MD 20814

Fax: 301-215-4500

Contact: Brooke Stauffer, brooke@necanet.org

- NECA/BICSI 568, *Installing Commercial Building Telecommunications Cabling* (new standard).

Standards Actions (Continued from Previous Page)**National Electrical Manufacturers Association****Office:** 1300 North 17th Street

Suite 1847

Rosslyn, VA 22209

Fax: 703-841-3367**Contact:** Khaled Masri, khaled.masri@nema.org

- C29.19, Solid Rod Fiberglass Insulators (apparatus post type) (new standard).

The Safety Equipment Association**Office:** 1901 North Moore Street, Suite 808

Arlington, VA 22209

Fax: 703-525-2148**Contact:** Cristine Fargo, czfargo@safetycentral.org

- ISEA 202, Gas Detector Tube Units - Long Term Types for Toxic Gases and Vapors in Working Environments (new standard).

American Society for Quality**Office:** 611 E. Wisconsin Avenue

Milwaukee, WI 53201-3005

Fax: 414-272-1734**Contact:** Margie Wirth, mwirth@asq.org

- ISO/ASQ QE 19011-2001, Guidelines on Quality and Environmental Auditing (new standard).

American Society for Testing and Materials**Office:** 100 Barr Harbor Drive

West Conshohocken, PA 19428

Fax: 610-832-9666**Contact:** Stephen Mawn, smawn@astm.org

- ASTM Z8532Z, Specification for Testing and Rating the Durability of Fenestration Products (new standard).

American Society for Testing and Materials

Standards activities of the American Society for Testing and Materials (ASTM) are published monthly in *ASTM Standardization News*. Orders for subscriptions or single copies of *ASTM Standardization News* may be submitted to ASTM, Subscription Dept.-SN, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428-2959. For information regarding ASTM membership, contact the Membership Services Department at 610-832-9691 (Fax 610-832-9667). ASTM publications may be ordered from the ASTM Customer Services Department at 610-832-9585 (Fax 610-832-9555). Comments on listed draft standards may be submitted by contacting the ASTM Standards Coordination Department at the above address. Questions may be addressed to the Technical Committee Operations Division at 610-832-9672 (Fax 610-832-9666). Additional information on ASTM activities is available on the ASTM Web site (<http://www.astm.org>). The following listings are extracted from *ASTM Standardization News* and are representative of NGS development activities that may be relevant to DOE operations.

The following ASTM standards are currently in coordination: (the due date for all items is September 10, 2000).

- A 240/A 240M-00, *Specification for Heat-Resisting Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels* (revised standard).
- A 767/A 767M-00a, *Specification for Zinc-Coated Galvanized Steel Bars for Concrete Reinforcement*, (revised standard).
- A 965/A 965M-99, *Specification for Steel Forgings, Austenitic, for Pressure and High Temperature Parts* (revised standard).
- A 1008, *Specification for Steel, Sheet, Cold-Rolled, Carbon, and Structural, High-Strength, Low-Alloy, and High-Strength, Low-Alloy with Improved Formability* (new standard).
- A 1011, *Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, and High-Strength Low-Alloy with Improved Formability* (new standard).
- D 1356-00, *Terminology Relating to Sampling and Analysis of Atmospheres* (revised standard).
- D 3386-94, *Test Method for Coefficient of Linear Thermal Expansion of Electrical Insulating Materials* (revised standard).
- D 3636-99, *Practice for Sampling and Judging Quality of Solid Electrical Insulating Materials* (revised standard).
- F 496-99, *Specification for In-Service Care of Insulating Gloves and Sleeves* (revised standard).
- New Standard, *Practice for Testing Chemical-Resistant Broadcast and Slurry-Broadcast Resin Monolithic Floor Surfacing* (Ref. Z6716Z).
- New Standard, *Guide for Statistical Evaluation of Atmospheric Dispersion Models* (Ref. Z6849Z).
- New Standard, *Specification for Rubber Insulating Sheeting* (Ref. Z7425Z).
- New Standard, *Practice for the Prediction of Contaminant Adsorption on GAC in Aqueous Systems Using Rapid Small-Scale Column Tests* (Ref. Z7429Z).
- New Standard, *Specification for Flexible Insulated Temporary By-Pass Jumpers* (Ref. Z7446Z).
- New Standard, *Test Method for Fatigue of Tire Cords (Disc Fatigue Test)* (Ref. Z7459Z).
- New Standard, *Practice for Using Field-Portable Fiber Optics Synchronous Fluorescence Spectrometer for Qualification of Field Samples Aromatic and Polycyclic Aromatic Hydrocarbons* (Ref. Z7671Z).
- New Standard, *Specification for a Precipitation-Hardening Bolting Material (UNS No. 7718) for High-Temperature Service* (Ref. Z8060Z).
- New Standard, *Practice for General Techniques of Thermogravimetric Analysis (TGA) Coupled with Infrared Analysis (TGA/IR)* (Ref. Z8202Z).
- New Standard, *Practice for Determining a Detection Limit for Asbestos Measurements Based on Counts* (Ref. Z8289Z).

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Standards Actions (Continued from Previous Page)

- New Standard, *Test Method for Determining the Dynamic Wiping Efficiency, Wet Particle Removal Ability, and Fabric Particle Contribution of Nonwoven Fabrics Used in Clean Rooms* (Ref. Z8320Z).
- New Standard, *Test Method for the Rate of Sorption and Sorptive Capacity of Nonwoven Fabrics* (Ref. Z8321Z).

The following newly published standards are available from ASTM:

- A 240/A 240M-00, *Specification for Heat-Resisting Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels* (revised standard).
- A 320/A 320M-00, *Specification for Alloy/Steel Bolting Materials for Low-Temperature Service* (revised standard).
- A 437/A 437M-00, *Specification for Alloy-Steel Turbine-Type Bolting Material Specially Heat Treated for High-Temperature Service* (revised standard).
- A 453/A 453M-00, *Specification for High-Temperature Bolting Materials, with Expansion Coefficients Comparable to Austenitic Stainless Steels* (revised standard).
- A 738/A 738M-00, *Specification for Pressure Vessel Plates, Heat-Treated, Carbon-Manganese-Silicon Steel, for Moderate and Lower Temperature Service* (revised standard).
- A 941-00, *Terminology Relating to Steel, Stainless Steel, Related Alloys, and Ferroalloys* (revised standard).
- B 903-00, *Specification for Seamless Copper Heat Exchanger Tubes with Internal Enhancement* (new standard).
- C 1461-00, *Specification for Mechanical Couplings Using Thermoplastic Elastomeric Type Gaskets for Joining Drain, Waste, and Vent DWV, Sewer, Sanitary, and Storm Plumbing Systems for Above and Below Ground Use* (new standard).
- C 1462-00, *Specification for Uranium Metal Enriched to More Than 15 and Less Than 20* (new standard).
- D 2487-00, *Practice for Classification of Soils for Engineering Purposes—Unified Soil Classification System* (revised standard).
- D 3301-00, *Specification for File Folders for Storage of Permanent Records* (revised standard).
- D 4439-00, *Terminology for Geosynthetics* (revised standard).
- D 5144-00, *Guide for Use of Protective Coating Standards In Nuclear Power Plants* (revised standard).
- D 6476-99, *Test Method for Determining Dynamic Air Permeability of Inflatable Restraint Fabrics* (new standard).
- D 6512-00, *Practice for Interlaboratory Quantitation Estimate Volume 11.02, 2001* (new standard).
- D 6519-00, *Practice for Sampling of Soil Using the Hydraulically Operated Stationary Piston Sampler* (new standard).
- D 6528-00, *Test Method for Consolidated Undrained Direct Simple Shear Testing of Cohesive Soils* (new standard).
- D 6529-00, *Test Method for Operating Performance of Continuous Electrodeionization Systems on Feeds from 50-1000 uS/cm* (new standard).
- D 6532-00, *Test Method for Evaluation of the Effect of Clear Water Repellent Treatments on Water Absorption of Hydraulic Cement Mortar Specimens* (new standard).
- D 6543-00, *Guide to the Evaluation of Measurements Made by On-Line Coal Analyzers* (new standard).
- E 84-00a, *Test Method for Surface Burning Characteristics of Building Materials* (revised standard).
- E 943-00, *Terminology Relating to Biological Effects and Environmental Fate* (revised standard).
- E 1261-00, *Guide for Selection and Calibration of Dosimetry Systems for Radiation Processing* (revised standard).
- E 2060-00, *Guide for Use of Coal Combustion Products for Solidification/Stabilization of Inorganic Wastes* (new standard).
- E 2069-00, *Test Method for Temperature Calibration on Cooling of Differential Scanning Calorimeters* (new standard).
- E 2074-00 (Includes change to title), *Test Method for Fire Tests of Door Assemblies, Including Positive Pressure Testing of Side Hinged and Pivoted Swinging Door Assemblies* (revised standard).
- G 166-00, *Guide for Statistical Analysis of Service Life Data* (new standard).

Comments, Questions, and Addresses

Comments: If you have any questions or comments, please contact Rick Serbu, EH-53, Manager, DOE Technical Standards Program Office (TSPO), 301-903-2856, Fax 301-903-6172, Richard.Serbu@eh.doe.gov.

Addresses: *Standards Actions* and *The Standards Forum* are now being published electronically and will be available only via your access to the TSP Web Site (<http://tis.eh.doe.gov/techstds/>). However, we would like to maintain both our e-mail and surface mail distribution lists so that we can send you special notices concerning technical standards and the DOE Technical Standards Program. Although we may currently have your surface mail address, we have e-mail addresses for only a few of you. We are requesting that those of you who are interested in receiving special notices please contact Marty Marchbanks, ORNL, 865-241-3658, Fax 865-574-0382, marchbanksmf@ornl.gov, and give him your updated e-mail and surface mail addresses.

Technical Standards Activities: The TSPO would like to be kept informed of the status of technical standards that are being prepared or coordinated for DOE. Please provide this information to the TSPO at 865-576-2395, bushar@ornl.gov.

Topical Committee Developments

Included in the list of 24 registered DOE Topical Committees is the DOE Procedures

Topical Committee. Maggie Sturdivant and Earl Carnes, both staff members in the newly reorganized Headquarters Office of Nuclear and Facility Safety Policy, EH-53, are joint points-of-contact [This information has not yet been posted on the Technical Standards Program (TSP) Web Site.] The Procedures Topical Committee is a particularly active group currently drafting "Principles for Procedure Systems to Support Integrated Safety Management" and a revision of DOE-STD-1029-92, *Writer's Guide for Technical Procedures*.

Another result of the EH reorganization has been the appointment of Jim Bisker, EH-53, to replace Dennis Kubicki as point-of-contact for the Fire Protection Topical Committee. Dennis joins the EH Office of Oversight, EH-2.

A draft charter for the DOE Air Cleaning and HEPA Filter Topical Committee has been reviewed by the TSP, but the scope of the group is still an unresolved issue among the prospective participants. As soon as agreement is reached on whether inclusion of the Air Cleaning community (associated principally with nonnuclear facilities) with the HEPA filter community (principally associated with DOE nuclear facilities) is acceptable, this group will become the 25th DOE Topical Committee.

To enhance coordination among DOE's nuclear safety experts, the TSP continues to look for groups of nuclear safety subject matter experts to form topical committees that are counterparts to American Nuclear Society subcommittees, in particular. Are you a member of a working group or technical group especially dealing with aspects of nuclear safety that would like to be recognized across the DOE complex? Would you like the opportunity to share ideas with like-minded scientists and engineers in the Department in a time of scarce resources and be more involved in standards work? If you are part of a group of subject matter experts that would like to affiliate with the TSP as a topical committee, contact M. Norman Schwartz, 301-903-2996, Norm.Schwartz@eh.doe.gov, or Richard Serbu, 301-903-2856, Richard.Serbu@eh.doe.gov.



standard, *A Graded Approach for Evaluating Radiation Doses to Aquatic and Terrestrial Biota* (Project Number ENVR-0011). The BDAC is pleased to announce that the technical standard has been issued for formal DOE-TSP full coordination and interim use within the Department,

with comments due to Steven Domotor (Stephen.Domotor@eh.doe.gov) by September 25, 2000. The technical standard can be downloaded from the DOE-TSP Web Site (<http://tis.eh.doe.gov/techstds/>), or the BDAC Web site (<http://homer.ornl.gov/oepa/public/bdac>). A memorandum from Dr. David Michaels (Assistant Secretary for Environment, Safety and Health) announcing the availability of the technical standard for use in evaluating radiation doses to biota in support of environmental compliance and eco-risk assessment activities is also posted on the BDAC Web site.

- IAEA Specialists Meeting on Protection of the Environment – Two members of the BDAC will be representing the Department at the International Atomic Energy Agency (IAEA)-sponsored "Specialists Meeting on Protection of the Environment from the Effects of Ionizing Radiation: International Perspectives," in Vienna, Austria from August 29–September 1, 2000. BDAC members will be giving presentations on the screening methods and guidance contained in the interim technical standard referenced above.
- BDAC Proposes and will Chair a Session at the Annual SETAC Meeting – Representatives from the BDAC (Dan Jones, Oak Ridge National Laboratory; Stephen Domotor, Department of Energy, Air, Water and Radiation Division) will cochair a session at the Society of Environmental Toxicology and Chemistry's (SETAC) 21st Annual Meeting, to be held in Nashville, Tennessee, November 12–16, 2000. The platform session, "Evaluating Radiation Doses to Ecological Receptors," will feature presentations from BDAC members on methods and guidance contained in the technical standard referenced above. Additional papers submitted by principal investigators within the U.S. and from international sources will also be featured. Refer to the SETAC Web site (<http://www.setac.org/>) for additional information.



Biota Dose Assessment Committee—Moving Forward with Technical Standard, Coordination, and Outreach Activities

By: Stephen Domotor, Chair, Biota Dose Assessment Committee (202-586-00871; Stephen.Domotor@eh.doe.gov)

- Technical Standard for Evaluating Radiation Doses to Biota now in DOE-TSP Full Coordination – The Biota Dose Assessment Committee (BDAC) continues to be active regarding the development and coordination of the DOE Technical Stan-



Tips from the Metrology and Accreditation Topical Committees



By: Don Ragland, Sandia National Laboratories-Albuquerque (SNLA) (505-845-9623, dragla@sandia.gov)

The DOE Metrology and Accreditation Topical Committees would like to pass along the URLs for two sites that we believe will be of interest to you. Each is packed with valuable links that could assist you in the performance of your jobs:

<http://www.fasor.com/~iso25/> (QA/Accreditation)

<http://home1.gte.net/metcal/> (Metrology)



ISO 9000 Compendium – 8th Edition

The new edition of the ISO 9000 year 2000 compendium is now available from Global. The compendium brings together the generic ISO quality management and quality assurance standards. It contains all of the International Standards and Final Draft International Standards that collectively make up the ISO 9000 and the associated ISO 10000 series of standards.

For more information, contact: Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado 80112; 303-397-7956, 800-854-7179, Fax 303-397-2740, global@iht.com.

ISO 9000:2000 Transition Training Requirement

Adapted from a Registrar Accreditation Board News Release dated August 15, 2000.

The Registrar Accreditation Board (RAB) has announced a requirement for its certified Quality Management Systems (QMS) ISO 9000 auditors to complete transition training on the soon to be released ISO 9000:2000 standards. RAB-certified auditors must complete the transition training course before conducting audits to ISO 9000:2000 if they wish to use these audits for maintaining certification. It is permissible for auditors to continue to audit to the ISO 9000:1994 standards for up to three years after issuance of the 2000 series, which is expected by the end of the 2000 calendar year.

RAB's Web site will offer a new section devoted to the latest developments surrounding the transition to ISO 9000:2000. This information was scheduled to be on-line at www.rabnet.com by September 1, 2000.

Public Comments Now Open to Developing ISO Standards

The International Organization for Standardization (ISO) is offering both the general public and special interest groups an opportunity to influence the direction of the hundreds of International Standards developed each year that affect so many aspects of our daily lives. ISO is opening the business plans that will be guiding the standards' development work of its technical committees to public scrutiny and comment by posting them on the Web: <http://www.iso.ch/bp>. So far, draft business plans covering standardization in the following areas are available for consultation: nuclear energy; transfusion, infusion and injection equipment for medical and pharmaceutical use; and laboratory glassware and related apparatus. As the business plans of ISO's 188 technical committees become available between now and the end of the year, anyone will be able to consult them and provide comments and input by e-mail to the committee secretariats.

ISO developed their business plan program to ensure a seamless fit between the standards it develops and the standards needed by the market, as well as to avoid wasting resources by developing standards for which there is little requirement. Putting the business plans of ISO's technical committees on the Web is intended to encourage more input from the business, industrial, and governmental users of ISO standards who will be able to comment directly to the experts developing standards for their sectors. The business plans will analyze conditions and trends in the market sector served by the technical committee and will be required explicitly to link work programs and sector needs. This exercise is expected to generate clear priorities for which standards are needed, the target dates for their completion, and what resources are needed to do the job.

For more information contact Roger Frost, Press Officer, ISO Central Secretariat, +41 22 749 01 11, Fax +41 22 733 34 30, frost@iso.ch.

Building Commissioning – A Quality Assurance Tool

Commissioning is a quality assurance tool used to assure the desired performance of planned systems in a building project. The use of building commissioning and its benefits to design professionals, contractors, owners

and occupants will be presented in a Professional Development Seminar (PDS) offered in Atlanta, Georgia, October 16–17, 2000, by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).

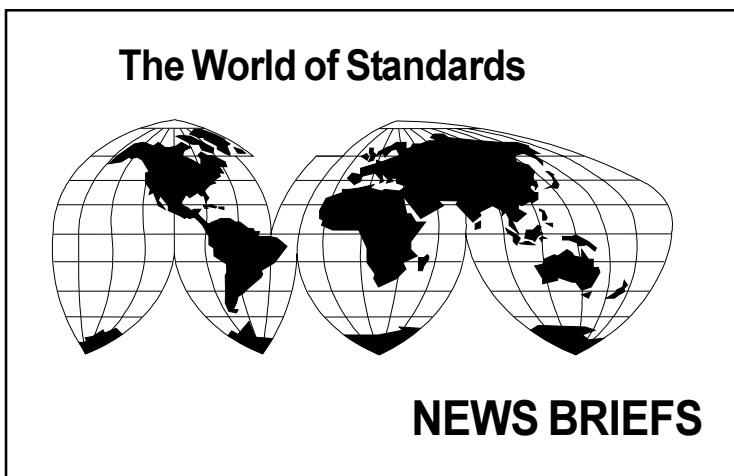
An Integrated Approach to Building Commissioning will present why commissioning is necessary for new and existing buildings, documentation requirements, and the economics of commissioning and methodology. The seminar will outline the commissioning process through each phase of a project, describe the responsibilities of those involved, and present case studies.

For more information, check out URL <http://www.ashrae.org/>.

ASHRAE Publishes 2000 Handbook—HVAC Systems and Equipment

The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) has published the 2000 ASHRAE Handbook, *HVAC Systems and Equipment*.

The new ASHRAE Handbook features a chapter on air cleaners for particulate contaminants based on ASHRAE Standard 52.2, *Method of Testing General Ventilation Air Cleaning Devices for Removal Efficiency by Particle Size*. The Handbook is published in two editions. One contains inch-pound (I-P)



►► **News Briefs** (Continued from Previous Page)

units of measurement, and the other contains the International System of Units (SI).

The 2000 ASHRAE Handbook also is available in CD format, in either a one-volume or four-volume set. The one-volume CD contains the 2000 Handbook. The four-volume CD contains the 2000 Handbook along with the three other volumes of the ASHRAE Handbook series: 1999, *HVAC Applications*, 1998, *Refrigeration*, and 1997, *Fundamentals*. Both CDs contain inch-pound units of measurement and the International System of Units. Improved search capabilities are provided and the four-volume CD also includes a searchable copy of ASHRAE Terminology of HVAC&R. Figures, tables and text may be copied and pasted into other documents.

For more information, check the ASHRAE news releases: <http://www.ashrae.org/ABOUT/currentr.htm>.

NACLA Announces Training Program for Evaluators

A training program for individuals who wish to qualify for service on evaluation teams of the National Cooperation for Laboratory Accreditation (NACLA) will be held on September 19–22, 2000, in Gaithersburg, Maryland. NACLA evaluation teams conduct on-site audits of accrediting bodies that apply for NACLA recognition. The typical NACLA evaluation team is a mix of individuals from accrediting and user organizations (known as specifiers). ISO/IEC 17025 (formerly Guide 25) is the standard for laboratory competence; ISO/IEC Guide 58 is the standard for qualified accrediting bodies. NACLA's mission is to coordinate the U.S. laboratory accreditation system by recognizing qualified accreditors and maintaining the Mutual Recognition Arrangement (MRA) among NACLA-recognized accreditors.

For more information, visit the NACLA Web site, www.nist.gov/nacla.

ISO 9000 Revisions Continue

On May 25, 2000, the national standards institutes of the International Organization for Standardization (ISO) returned a positive vote on the Draft International Standard (DIS) version of the ISO 9000 family of standards, approving ISO 9000 revisions currently under development. This marks an important step towards turning revisions into published International Standards, the final transition hinging upon the institutes' similar approval of Final Draft International Standard (FDIS) versions. The documents—ISO 9000, ISO 9001 and ISO 9004—will now undergo further revision before their release as FDISs in September 2000 for a two-month ballot by ISO's members. If that vote is positive, the ISO 9000 revisions will be published as fully fledged International Standards before the end of the year. The revisions are being carried out by ISO technical committee ISO/TC 176, Quality Management and Quality Assurance, in which national delegations of experts from 74 countries participate.

An estimated 350,000 quality systems based on ISO 9000 standards have been implemented by organizations of all types in at least 150 countries.

A considerable amount of information on the ISO 9000 revisions, including answers to Frequently Asked Questions and Transition Planning Guidance, is posted on ISO's Web site: www.iso.ch.

NIST and NACLA Aim for Smoother, Simpler Laboratory Accreditation System

A milestone in the development of a national system for laboratory accreditation was reached July 13, 2000, with the signing of a memorandum of understanding (MOU) between the National Cooperation for Laboratory Accreditation (NACLA) and the National Institute of Standards and Technology (NIST).

Under the MOU, the organizations aim to coordinate the more than 100 private-sector and government programs that assess and accredit testing and calibration laboratories in the United States. Lack of a coordinating mechanism has led to unnecessary duplication and sometimes contradictory accreditation standards and requirements, resulting in inefficiencies that can disadvantage U.S. exporters and other businesses and organizations that rely on the services of accredited laboratories. Sixteen associations, businesses, and government agencies endorsed the goals of the MOU.

Terms of the MOU call for NIST to encourage government agencies to use NACLA-recognized accreditation bodies and to encourage laboratory accreditors to seek NACLA recognition. In addition, NIST will treat NACLA recognition as a suitable alternative to its own laboratory-accreditor recognition program, which was established to support NIST's role as a designating authority under international, government-to-government trade agreements.

The NIST-NACLA MOU was proposed in the *Federal Register* of May 19, 2000. Comments on the proposal were solicited and a public hearing was held at NIST's Gaithersburg, MD headquarters on June 23, 2000. Public feedback was overwhelmingly supportive. The full text of the MOU and its appendices can be found on the NIST Web page, <http://ts.nist.gov/>.

IEC Realizes Standards Production Efficiencies

Fifteen technical committees and subcommittees have shown that they are firmly committed to the IEC's efforts to produce standards more quickly. In 1999, each of the committees brought to market at least one first edition of an IEC standard which took less than three years to prepare.

The subjects covered included uninterruptible power systems, lamps, and electronic and fiber optic components and equipment.

The IEC's drive to produce timely and relevant standards is a response to market demand. While average development time for standards has fallen from 87 months to 65 months, this is still seen as being far too long. IEC's goal is to see the average IEC standard developed in 30 months.





► News Briefs (Continued from Previous Page)

For more information, check out the *iec-etechnics* item at <http://www.iec.ch/etechnics/ed3.2000/frames-news-e.htm>.

Federal Agency Participation in Voluntary Consensus Standards (VCS) Organizations

An in-depth evaluation is presented in the May/June 2000 edition (Vol. 52, No. 3) of *Standards Engineering Journal of the Standards Engineering Society* concerning the mandated and implied expectations resulting from the Office of Management and Budget's Circular A-119, *Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities*, February 10, 1998. The front-page article, entitled "Participation By Federal Agencies In Voluntary Consensus Standards Bodies," is the joint effort of Paul Gill, William W. Vaughan, and Stephen Lowell. The article was prompted by the authors' observations that there is general ignorance and misunderstanding among Federal employees and contractors concerning the importance and policies of their participation in VCS bodies.

The article summarizes some of the key responsibilities of Federal VCS participants with respect to the requirements and limitations regarding their roles in VCS organizations. Some of the subjects covered include the purposes of participation, agency support of Federal representatives, acceptable types of support by contributors to the VCS, and other business activities involved in Federal participation in VCS organizations.

Standards Engineering Journal of the Standards Engineering Society is a publication of the Standards Engineering Society, 13340 SW 96th Avenue, Miami, Florida 33176; 305-971-4798, Fax 305-971-4799, hgzigggy@worldnet.att.net, www.ses-standards.org.



► SRS Standards Program (Continued from Page 1)

Guide Number 07210-G, Rev. 0, *Thermal Insulation*

This guide describes materials and installation for thermal fiberglass insulation blankets and batts.

Guide Number 07920-G, Rev. 0, *Caulking and Sealing*

This guide describes interior and exterior joint sealants for new building construction and for maintenance of existing buildings. Included is guidance for selecting appropriate sealants for various types of joints and recommendations for sealant installation.

Guide Number 09903-G, Rev. 0, *Protective Coatings of Underground Steel*

This engineering guide document provides guidance for surface preparation, materials, application instructions, handling, backfilling, and inspection to be used for corrosion protection of carbon steel and stainless steel piping/ structures buried underground.

Guide Number 13090-G, Rev. 0, *Hood and Glovebox Guide*

This document provides general guidelines for the design, fabrication, installation, and testing of gloveboxes, hoods, enclosures, and applicable components at SRS.

Guide Number 15060-G, Rev. 1, *Application of ASME B31.3*

This guide provides information for the proper application of the ASME B31.3 Code "Process Piping." ASME B31.3 applies to process piping and tubing systems at SRS. This guide also contains piping specifications per ASME B31.1 and AWWA. The user is responsible for compliance with all aspects of the Design Code being applied. This guide addresses only B31.3; however, this guidance is typical of the requirements of other Codes.

Guide Number 16051-G, Rev. 0, *Installation of Electrical Raceway Systems and Cable Trays*

This document provides guidance for the installation of conduits and conduit fittings, cable trays, cable tray covers and cable tray fittings, raceway supporting materials, pull boxes, wireways, manholes, handholes, and all underground and embedded raceway systems.

Guide Number 16256-G, Rev. 0, *Diesel Generator Systems*

This guide describes diesel generation units for use in either emergency or standby service. The unit should be composed of the diesel-generator; controls, surveillance and protection systems; and auxiliary systems. This guide describes the principal design criteria, design features, qualification considerations, testing, and inspection requirements for a diesel-generator unit.



Standards Forum

Editor Marty Marchbanks

Distribution: If you would like to have your name added to (or removed from) the Technical Standards Program mailing list, or you need to make an address change, please notify Marty Marchbanks, Oak Ridge National Laboratory (ORNL), 865-241-3658, Fax 865-574-0382, marchbanksmf@ornl.gov.

Comments: If you have any questions or comments please contact Rick Serbu, EH-53, 301-903-2856, Richard.Serbu@eh.doe.gov. If you have any questions or comments on DOE standards projects, please call Don Williams, ORNL, 865-574-8710, williamsdljr@ornl.gov.

Publication: ORNL and DOE's ES&H Technical Information Services posts *The Standards Forum* quarterly for the DOE Technical Standards Program at <http://tis.eh.doe.gov/techstds/>.

Upcoming Meetings

October 12–13, 2000

American Society for Quality 44th Annual Fall Technical Conference

Marriott City Center – Minneapolis, Minnesota

Theme: Statistical Thinking, Statistical Methods, and Quality Standards: Decision Making in the New Millennium

Co-sponsored by the American Society for Quality and the American Statistical Association. The fundamental principles of statistical thinking will be stressed: (1) all work occurs in a system of interconnected processes and (2) variation exists in all processes, and understanding and reducing variation are keys to success. Sessions will offer the latest developments in statistical methods as they relate to quality improvement and quality decision making.

For more information check out URL <http://www.amstat.org/sections/spes/FTC2000.htm>.

October 18, 2000

2000 World Standards Day Celebration

National Geographic Museum – Washington, D.C.

Theme: *Peace and Prosperity*

World Standards Day (WSD) is a celebration of the voluntary consensus standards system. The U.S. celebration of World Standards Week 2000 will begin on Monday, October 16, 2000, at the Ronald Reagan Building and International Trade Center. A number of activities and events showcase the standards and conformity assessment participation of individuals from around the globe. One of these activities is the WSD Paper Competition with the theme "Standards for Change and Stability."

For more information, check out American National Standards Institute's Web site at <http://www.ansi.org/>.

October 19–21, 2000

American Institute of Steel Construction Annual Convention

Ritz-Carlton San Francisco – San Francisco, California

The keynote address will be given by John G. Voeller of Black & Veatch, and will focus on how to make technology a productive tool in today's corporations. Po Bronson, a Silicon Valley chronicler, will examine how technology is changing the nation's landscape. Brad Vaughan, Vice President of BV Solutions, will challenge the audience to think strategically to get new and better results. Others will speak on e-technology in the construction industry. A panel will focus on new technology standards that have drastically impacted the steel construction marketplace.

For more information, check out the AISC Web site at <http://www.aisc.org/>.



November 5–10, 2000

International Mechanical Engineering Congress and Exposition

Walt Disney World Dolphin – Orlando, Florida

Theme: *Beyond Traditional Boundaries*

In support of the theme, the International Congress Committee will sponsor a highlight topic symposium. This symposium will consist of four panel discussions, one each day, Monday through Thursday.

For more information, check the congress Web site at: <http://www.asme.org/conf/congress00/>.

November 12–16, 2000

Society of Environmental Toxicology and Chemistry—21st Annual Meeting

Nashville Convention Center – Nashville, Tennessee

Theme: *Environmental Science in the 21st Century: Paradigms, Opportunities, and Challenges*

The meeting will focus on the multidisciplinary components of modern environmental science needed for protecting, managing, and restoring the environment for the enhancement of ecological and human welfare.

For more information, check out the SETAC Web site at: <http://www.setac.org/>

November 12–17, 2000

2000 American Nuclear Society International Meeting

Marriott Wardman Park Hotel – Washington, D.C.

Embedded Topical Meetings: "Best-Estimate" Methods in Nuclear Installation Safety Analysis; Nuclear Plant Instrumentation and Control & Human Interface Technologies; Nuclear Applications of Accelerator Technology

Check out the Web site at <http://www.ans.org/meetings/>.

November 12–17, 2000

American Institute of Chemical Engineers 2000 Annual Meeting

Westin Bonaventure/Marriott Downtown – Los Angeles, California

Theme: *Exchanging Ideas for Innovation*

Topical Conferences include: Fourth International Particle Technology Forum, Energy and the Environment, Bioinformatics and Genomics, Chemical Engineering in the New Millennium, and Chemical Engineering Education. The exhibition "SHOWcase 2000" will be featured. Short courses and a workshop on teaching Chemical Engineering will be offered.

For additional information, check out the AIChE web site at <http://www.aiche.org/>.